

Work Order ID 157483

Wednesday, May 10, 2017 4:29:37 PM

157483

Page 1

Item ID: D3913-9 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Hinge Rib
 Start Date: 5/12/2017 Start Qty: 7.00 ***7*** Cust Item ID:
 Required Date: 5/15/2017 Req'd Qty: 7.00 ***7*** Customer:
 Reference: SCHEDULED/C

Approvals: Process Plan: **DAS 21 9-89** Date: **MAY 11 2017** Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3913	C

100		0.00							
100									
Large Fab	Memo	1.26							
Large Fab	1- Cut tube as per dwg D3913 2- remove identification marks and deburr								

7x DG 2017-05-11

110	QC6- All purchased or subcontracted products	0.00							
110									
QC	Memo	0.00							
Quality Control									

7 **DAS 38 9-89**
MAY 12 2017

120	Identify as per dwg & Stock Location: <u>WA004</u>	0.00							
120									
Packaging	Memo	0.07							
Packaging	LOCATION: WA004								

7x DG 2017-05-15

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐								
		OTHER : ☐							

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Page 2

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC21- Final Inspection - Work Order Release	0.00							
130									
QC	Memo	0.70							
Quality Control									

17/5/15 

DAS
21 MAY 12 2017
9-88

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

Wednesday, May 10, 2017 4:29:37 PM

Page 1

Work Order ID: 157483

157483

Parent Item: D3913-9

D3913-9

Parent Item Name: Hinge Rib

Start Date: 5/12/2017

Required Date: 5/15/2017

Start Qty: 7.00

Required Qty: 7.00

Comments: IPP Rev:A new issue DD 10.03.19 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304TS0.750W.049		Purchased	No			100	f	803.2810	7.875	58.02632			

M304TS0 750W 049

DC 2017-05-11

304 SQ Tube .75x.75x.049W

Location

Loc Qty

Loc Code

WA004

803.281

B1371752 →

59

M136907

117.281

M137172

186

M137401

500

DQA: _____ Date: _____



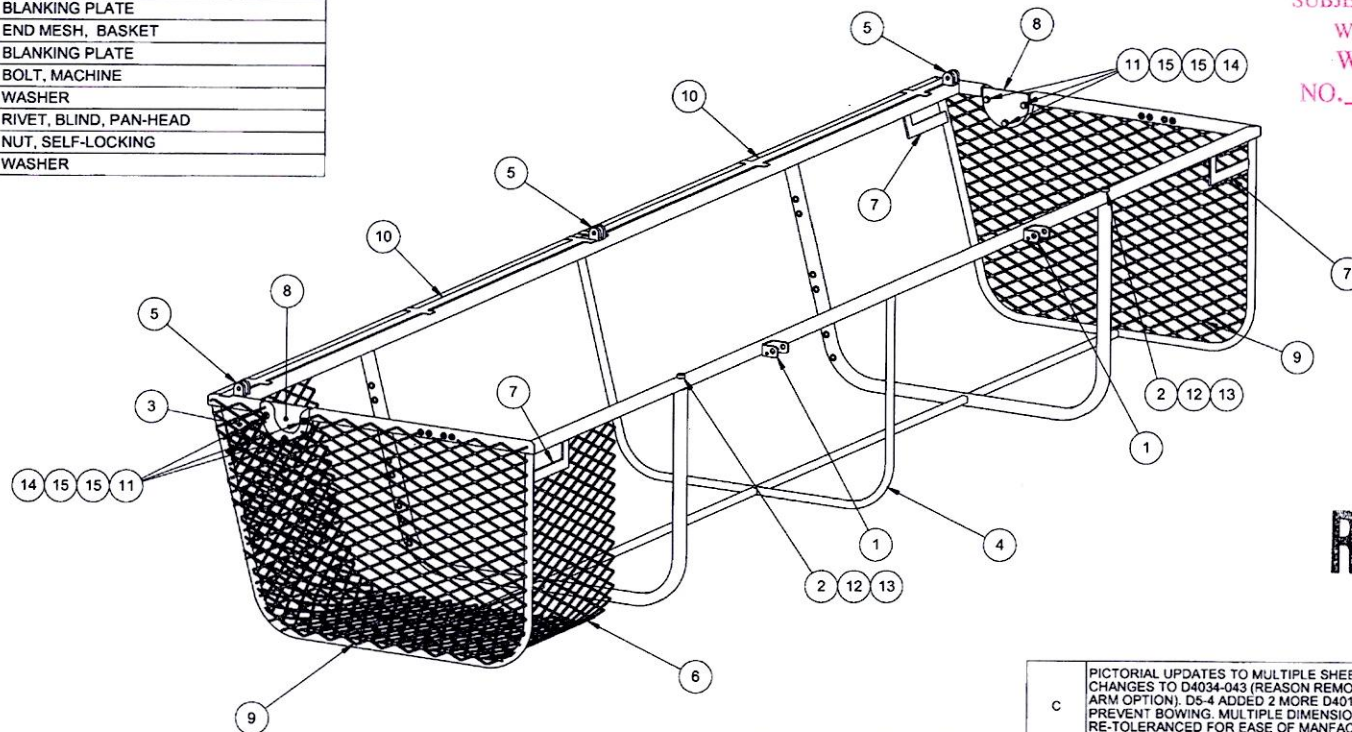
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong- ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : ☐							

ITEM	QTY	P/N	DESCRIPTION
	X	D3913-041	LONG BASKET BASE ASSY (350)
1	2	D2581	MOUNTING BRACKET
2	2	D2931	BUMPER
3	1	D3913-15	WIDE HANDLE PLATE
4	1	D3913-101	TUBULAR ASSY (350 LONG BASKET)
5	3	D4016-1	HINGE HALF, BASE
6	1	D4020-1	MESH (350 BASKET LONG BASE)
7	3	D4021-1	HANDLE PLATE
8	2	D4021-5	BLANKING PLATE
9	2	D4020-11	END MESH, BASKET
10	2	D4672-1	BLANKING PLATE
11	6	AN3-10A	BOLT, MACHINE
12	2	AN960JD8	WASHER
13	2	MS20600AD4W3	RIVET, BLIND, PAN-HEAD
14	6	MS21042L3	NUT, SELF-LOCKING
15	12	NAS1149F0332P	WASHER



D3913-041 LONG BASKET BASE ASSY (350)
(MESH SHOWN LOCALLY FOR CLARITY)

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 43.9 lbs APPROX
- 8) INSTALL AFTER FINISH
- 9) MASK HOLES PRIOR TO POWDER COAT
- 10) WELD PER DART QSI 004

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UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE

WORK ORDER

NO. 157483 MOW

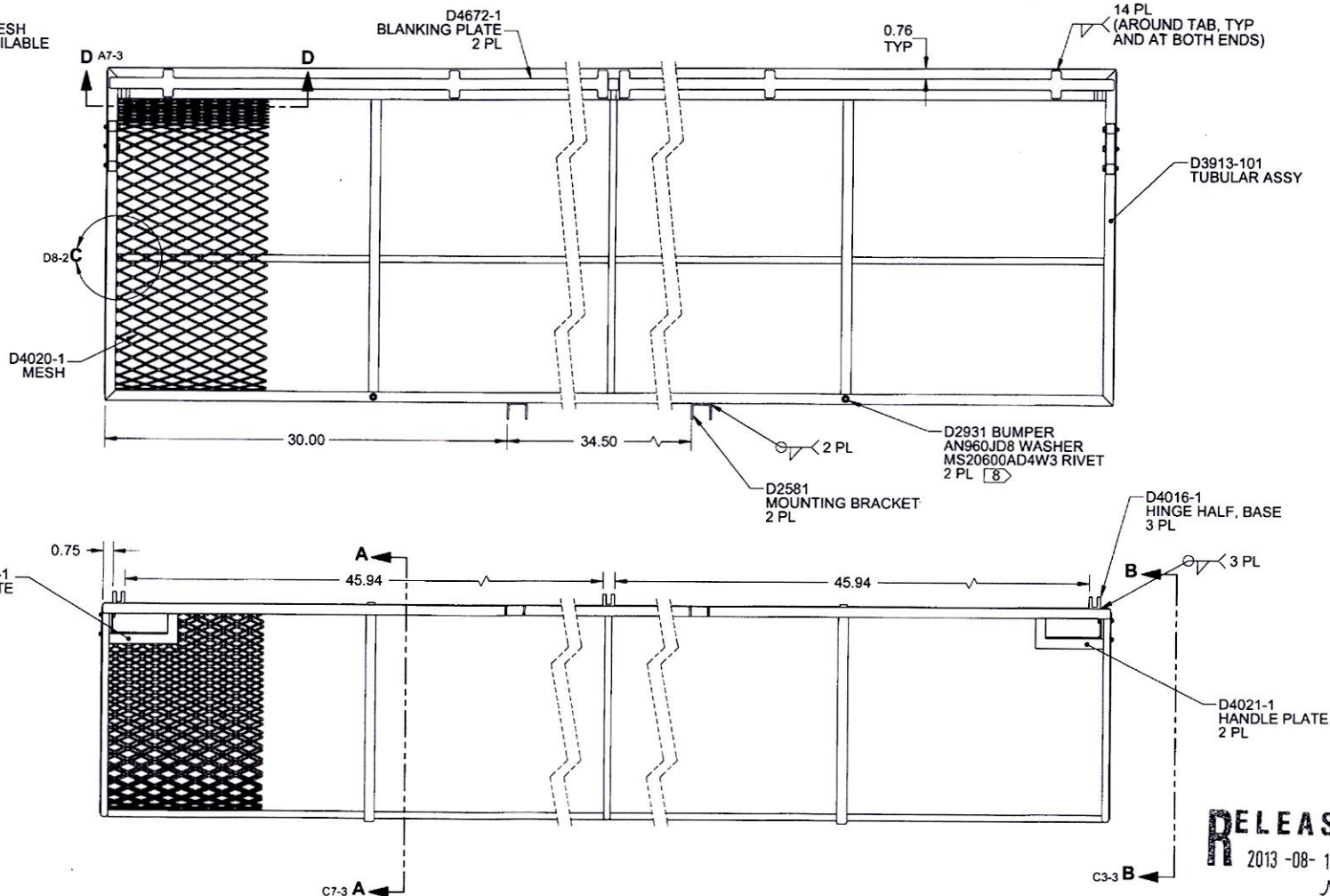
170511

RELEASED
2013-08-16

C	PICTORIAL UPDATES TO MULTIPLE SHEETS FOR CHANGES TO D4034-043 (REASON REMOVAL OF PROP ARM OPTION). D5-4 ADDED 2 MORE D4017-7 RIBS TO PREVENT BOWING. MULTIPLE DIMENSIONS RE-TOLERANCED FOR EASE OF MANUFACTURE. SECTION F-F & G-G ADDED.	AJS	13.07.18
B	ADD D4672-1 (ZN C4-1, C6-1, D2-2, D2-3, & D5-2). REASON: PAR12-197.	MB	12.06.15
A	NEW ISSUE	JPH	10.03.16
REV	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	UP	DRAWING NO.	REV. C
MFG. APPR.	MA	D3913	SHEET 1 OF 6
APPROVED	MA	TITLE	SCALE
DE APPR.	MA	LONG BASKET BASE ASSY (350)	NTS
DATE	13.07.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

TACK WELD MESH
AT EVERY AVAILABLE
LOCATION

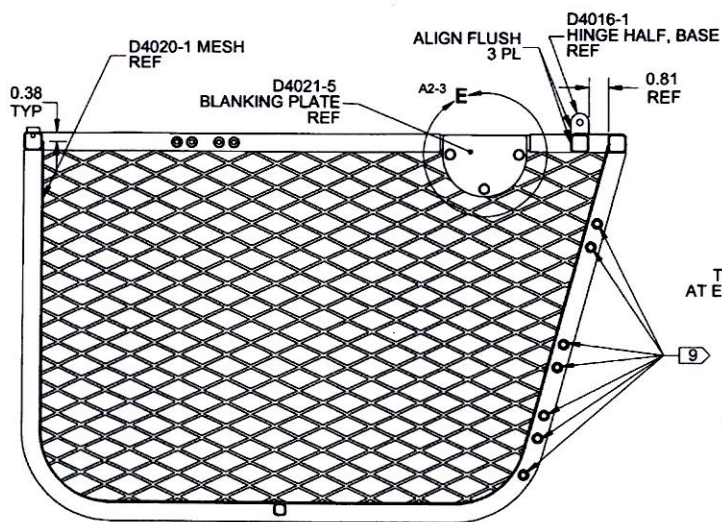
DETAIL C D7-2
SCALE: 2X



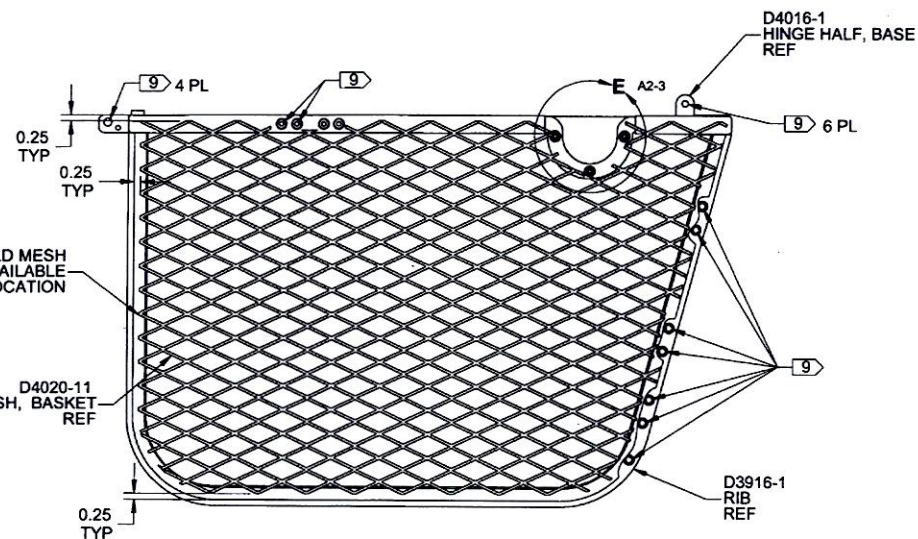
D3913-041 LONG BASKET BASE ASSY (350)
(MESH SHOWN LOCALLY FOR CLARITY)

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2013-08-16

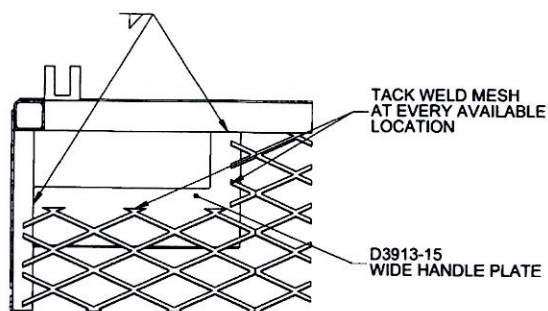
DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3913	SHEET 2 OF 6
APPROVED		TITLE	SCALE
DE APPR.		LONG BASKET BASE ASSY (350)	NTS
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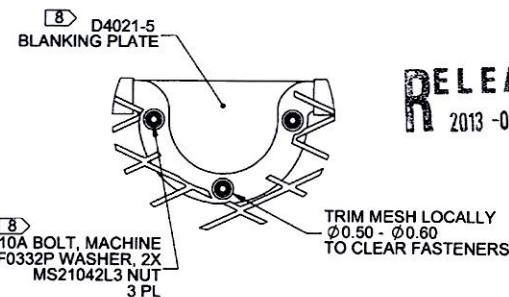
SECTION A-A A5-2



VIEW B-B A2-2



SECTION D-D
TYPICAL FOR ALL
HANDLE PLATES D6-2

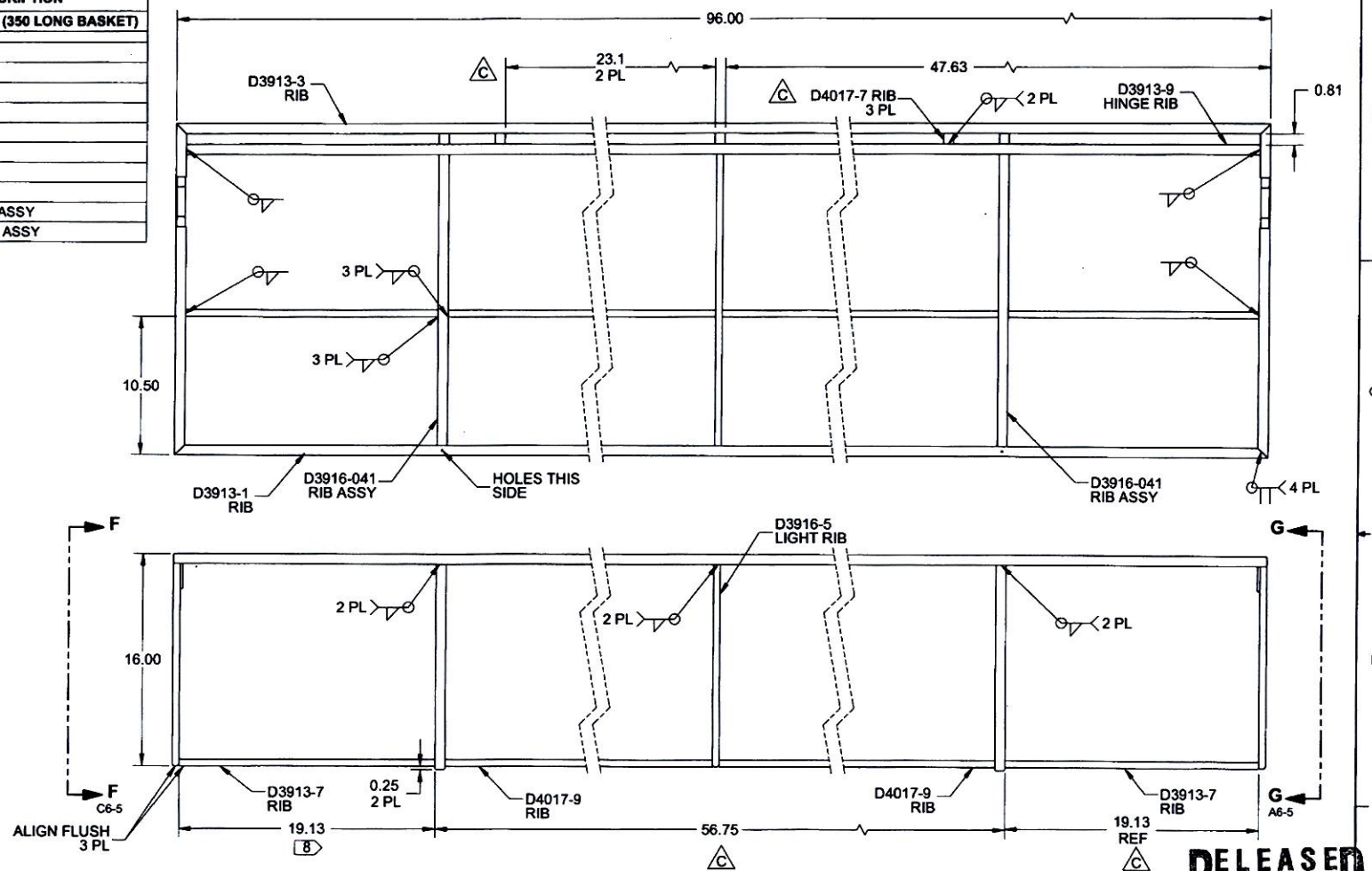


DETAIL D2-3
D6-3

RELEASED
2013-08-16

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3913	SHEET 3 OF 6
APPROVED		TITLE	SCALE
DE APPR.		LONG BASKET BASE ASSY (350)	NTS
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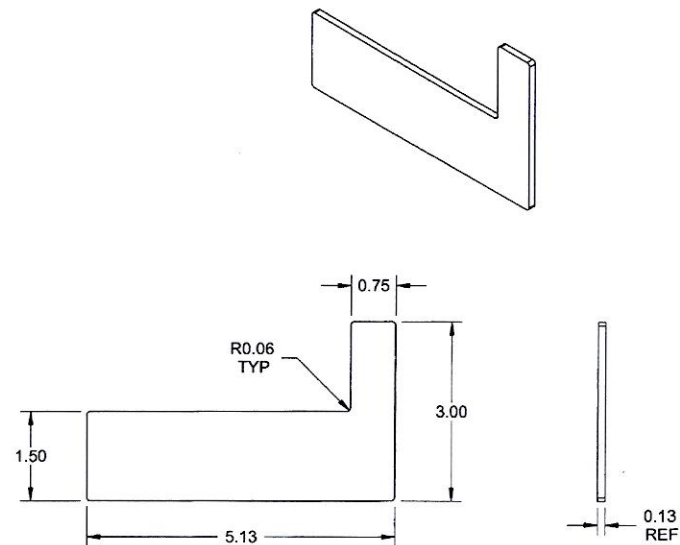
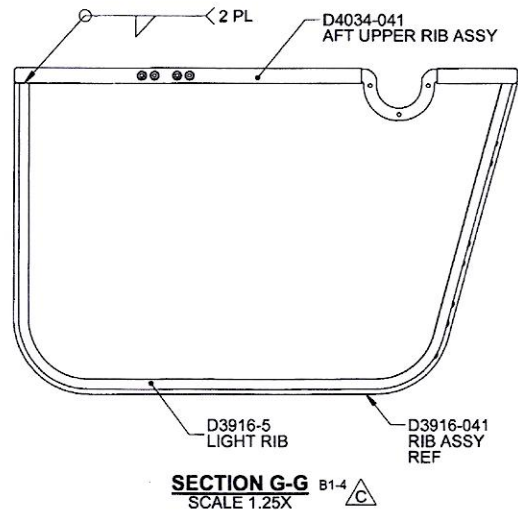
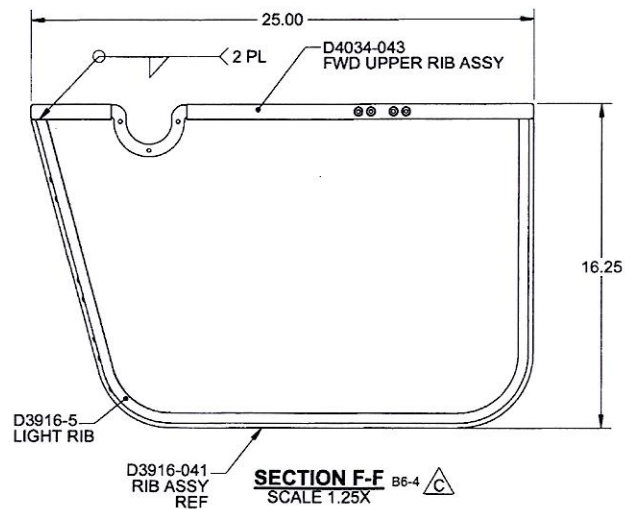
ITEM	QTY	P/N	DESCRIPTION
	X	D3913-101	TUBULAR ASSY (350 LONG BASKET)
1	1	D3913-1	RIB
2	1	D3913-3	RIB
3	2	D3913-7	RIB
4	1	D3913-9	HINGE RIB
5	3	D3916-5	LIGHT RIB
6	2	D3916-041	RIB ASSY
7	3	D4017-7	RIB
8	2	D4017-9	RIB
9	1	D4034-041	AFT UPPER RIB ASSY
10	1	D4034-043	FWD UPPER RIB ASSY



- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 22.65 lbs
 - 8) TOLERANCE FOR XX.XX DIMENSIONS ± 0.06 FOR D3913-101
 - 9) WELD PER DART QSI 004

D3913-101 TUBULAR ASSY (350 SHORT BASKET)

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	REV. C
DRAWN	AJS		
CHECKED		DRAWING NO.	SHEET 4 OF 6
MFG. APPR.		D3913	SCALE
APPROVED		TITLE	NTS
DE APPR.		LONG BASKET BASE ASSY (350)	
DATE	13.07.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



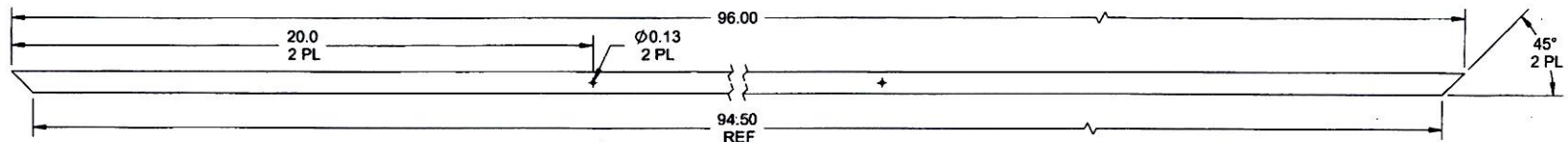
D3913-15 WIDE HANDLE PLATE

NOTES:

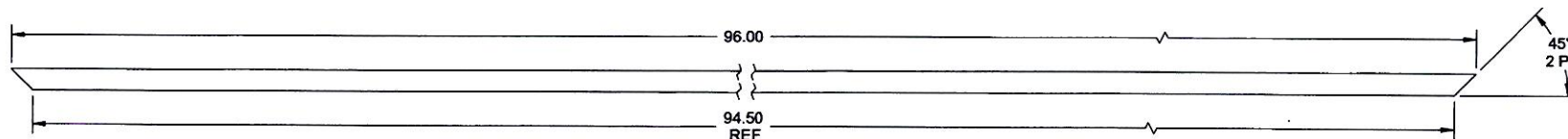
- 1) MATERIAL: 304/316 STAINLESS STEEL SHEET ANNEALED 2B FINISH, PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240 OR ASME SA240 REF DART SPEC M304S11GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.31 lbs

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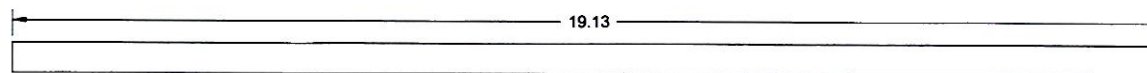
DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3913	SHEET 5 OF 6
APPROVED		TITLE	SCALE
DE APPR.		LONG BASKET BASE ASSY (350)	NTS
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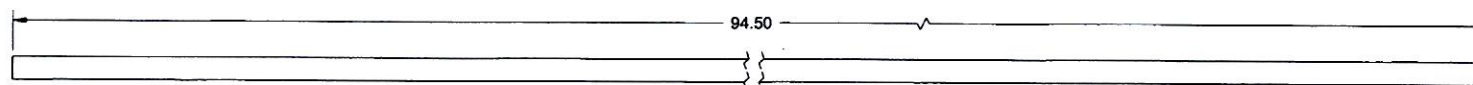
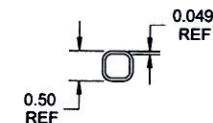
D3913-1 RIB



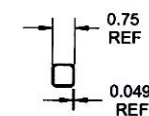
D3913-3 RIB



D3913-7 RIB



D3913-9 HINGE RIB



NOTES:

1) MATERIAL -1, -3, -9: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.049 WALL
PER ASTM A554 OR ASTM A269 MILL FINISH
REF DART SPEC. M304TS0.750W.049

-7: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBE, 0.50 X 0.50 X 0.049 WALL
PER ASTM A554 OR ASTM A269 MILL FINISH
REF DART SPEC. M304TS0.500W.049

- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: SEE ASSEMBLED WEIGHTS

RELEASED
2013-08-16

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3913	SHEET 6 OF 6
APPROVED		TITLE	SCALE
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